

IN THE CLAIMS:

1 - 27. (canceled)

28. (new) A method of removing a protective group of a nucleotide which comprises:

forming storing regions and addresses identifying the storing regions on a track which can be tracked by an optical beam on a substrate;

arranging in two or more of each of said storing regions a nucleotide having a protective group;

selecting a storing region in which a nucleotide having a protective group is arranged by reading the address identifying said storing region by said optical beam;

irradiating the nucleotide having a protective group and arranged in the selected storing region by said optical beam; and

removing the protective group of the nucleotide having the protective group,

wherein each of said storing regions has a form of a concave region or a convex region of a first pregroove on said substrate or a flat region on said substrate.

29. (new) A method of removing a protective group of a

nucleotide according to claim 28 wherein each address is constituted by a prepit or second pregroove on said substrate, and a position of the address on said substrate is different from a position of the storing regions on the substrate.

30. (new) A method of removing a protective group of nucleotide according to claim 28 which comprises a step of controlling a de-protective reaction of the protective group of a nucleotide by giving a wavelength dependency to the light wavelength absorption characteristics of the protective group of the nucleotide and removing a protective group of nucleotide by changing the wavelength of an irradiated optical beam.